

# W.A.C.O. PRINTOUT

#31... NOV., 1987

## WHICH BASIC IS BEST FOR YOU?

by

DR. WHO?

When the ST hit the market it came with a Basic language. ST basic as we later called it.

Probably the first person who bought an ST had an Atari 8 bit computer. If so, I would like to have seen his or her face when he or she had booted up the ST Basic for the first time. They were accustomed to a command screen, with editing on the same screen. I can picture cold sweat on that body seeing 3 windows on the screen at the same time. It must have been a nightmare come alive.

For those 8 bitter's that had been using Turbo basic, I bet ST basic must have seemed real primitive, reminiscent of the tortoise and the hare.

As more ST's were being sold and more people starting to program in basic, the cry went out: *WE NEED A BETTER BASIC!*. And so, the cry was heard and the battle of the Basics began!

In this article I will try to give you the good and bad points of some of those basics. They are listed below.

GFA BASIC	Michtron	\$79.95
REAL BASIC	CCL	\$79.95
FAST BASIC	Eidersoft	\$89.95
ASIC	Dtack	\$44.95

### TABLE OF IMPORTANT FEATURES

	GFA	REAL	ATARI	FAST	DBASIC
DOCUMENTATION	2,5	2,4	3,5	3,5	3,5,7
(SEE CODING BELOW)					
MOUSE	N	Y	Y	Y	N
LOADING TIME	10.9s	13.7s	20.2s	18.4	8.8s
FOR NEXT LOOP 100K TIME IN SECONDS	11.9	13.5	gave up	15.7	10.6
FOR-NEXT CLEARING SCREEN AND PRINTING CHARACTER 5,000 TIMES IN MIN/SEC	3.49	2.4	up	4.55	2.53
DRAWING LINES 600x300 HORIZONTALLY IN MIN/SEC	3.43	7.3		7.54	6.42
DRAWING LINES 600x300 VERTICALLY	3sec	57sec		4.3sec	1.3sec
TE SIZE	56K	221K	139K	124K	?
MEMORY USED	188K	276K	287K	?	83K

### CODES AND MEANINGS

1. INADEQUATE
2. ADEQUATE
3. GOOD
4. NO EXAMPLES
5. SOME EXAMPLES
6. A LOT OF EXAMPLES
7. EXTENSIVE

## REAL BASIC

This is an interpreted language and its speed is impressive. It supports random and sequential files. There is an assembler that comes with it with very little doc's. You are forced to see the title screen each time you load the program.

Once you are in basic, the screen is full of dots, and the cursor is the logo of the software company, CCL. I like a plain block cursor.

In the command mode there is no editing other than the line you're on. Once you press return you either type the line over again or use EDIT followed by a line number. It does support multiple instructions.

While in the edit mode you can edit by the arrow up and arrow down, but you cannot add any new lines.

I found no way of getting out of a program once it is executed. I had to reset and reboot the program.

There is a whopping 55 pages of documentation. One of my pet peeves is not having an index at the end of the book. Fortunately this has one.

Another of my peeves are no examples. This has none. There is no run time package, so it limits distribution of programs written in this language to the people who own a copy.

One is allowed to backup the program but still, that person must use the original to boot basic. I see no advantage to this. An error can occur on the original and you would need another copy anyway. Because of the copy protection, it is impossible to copy this program, at least there are none as of yet.

Real basic beats all the other basics when printing characters to the screen, but not the fastest when using empty for-next loops. I am not sure why this is. See table. These times are approximate. A stop watch was used. It may be that using for next loops was a simple way of doing a test, but it was used for simplicity. Other benchmark tests are not full proof or should I say truthful. Software companies only test what their product is good at and ignore what it what it is deficient at. This way does not leave any questions. So what is our goal? To get a visual of our output, whatever that may be animations or printing tables or the likes. The best way to do this test is the simplest, using for-next loops, clear the screen and print a character and ignore the vertical blanking. What can I say, "I'm a simple guy with simple tastes."

Summarizing: Real basic is the right name for it, because it is just that, 'real' Basic; nothing very special; something you would see in an 8 bit machine.

Have you seen turbo basic for the 8 bit? It is public domain software! I will have to rate this as public domain software!

## DBASIC

Dbasic is a compiled language and should be quite fast, in fact the fastest of all the basics thus far, but as you see from the table it is the fastest using the for-next 100k times, in fact over one second faster than GFA. Quite impressive. But it does slow down a little when printing to the screen. This places it in third place.

It does not support GEM and that is a minus. I like my mouse! Here are some real world facts; the ST was built around GEM and it is defeating the purpose of the ST by not using the mouse, drop down tables, uniqueness of windowing etc,etc and etc. The same thing goes for the Mac!

If I wanted an IBM I would have bought and IBM!

*(One should not pat himself on the back too hard, its a long reach and you may end up with shoulder and back pain!)*

Dbasic is using a new form in file structure. It appears to be some sort of sequential files, mixing numeric and string variables and being able to use arrays. I like being able to use arrays in my fields, but counting bytes is not my cup of tea. Random access is the only way to go when dealing with multiple records in a data file, especially if it is a huge file such as the one I am working on at the present. Variables in memory do not shift around they stay at the same place they were put. This makes it a little easier when doing indexing. The problem here is the documentation on dataload and datasave, a few examples and that is it. If

I would want to write a data base in Dbasic it would be hard, there is not enough of info on Files and records.

The documentation has 281 pages with more technical stuff then I care to digest and guess what? Nooooo index! Whoever wrote the manual must have skipped his Technical Writing course in college. To me a book of technical information without an index is like eating shredded wheat without 'k! Or going skiing without a ski. Or canoeing without oars. Must I go on to get the point across.

I myself cannot use this program. There are better basic languages out there for the ST, and if you read on you will find out! I rate this one confusing!

### GFA BASIC

This is a structured language, which was a little awkward at first to grasp. It grows on you.

GFA being a structured language has no line numbers. The bad part about this is in debugging. For debugging purposes I would like to start at any point in my program. Maybe start executing at line number 1020 or label 'Change'. With GFA basic you cannot do this. Since I wasn't able to do this, it took more time then I expected to spend on the program.

Thus far GFA has been the best program to work with. But I do have a few gripes though.

I Paid \$79.95 for the program and it wasn't the latest version out. It will cost me another \$15.00 to upgrade doc's and disk. The upgrade is not a bad price, but when you pay \$79.95 for a program you expect it to be the latest version out.

I don't know about the newest version, I know the version I have is so full of bugs that raid would have a full time job on its hands. Well no it seems that way.

I started writing a program which is a large data base. It needs over twenty variables in a record. It creates new files, records, updates, query, inserts, deletes records or whole files. The printing program module actually prints out on a form called a Narda form. This is a specialized program for warranty centers, who service consumer electronics under warranty.

The main program is small and the rest of the program is broken up in many subroutines. After data entry was finished it gave me the option to fill out the Narda form using the printer.

At this point I like to say that I like the way record are retrieved using Random access. All that needs to be done is Get#n,m. Where #n is the channel number and m is the record number. Whatever you have in the field statement will be retrieved. In an example lets say we have variables a\$, b\$, c\$, d\$, e\$, f\$ in our record. And we have 5 records in a file called 'Help'. To extract record 4 and variables a\$, c\$, f\$; we would:

```
Open "R",#1,"Help",120
Field #1 20 as a$,20 as b$,20 as c$,20 as d$,20 as f$
GET#1,4
Help1=a$
Help3=c$
help6=f$
Close 1
```

Where R is random access, #1 is the channel we are transferring data on, 120 is the total bytes the variables consist of. In the field statement we set the amount of bytes for each variable. Unfortunately GFA only allows a maximum of 19 variables to the field and only one field to a channel.

Another drawback is you cannot use numeric variables. They must be converted to strings first before they are stored in a record. Then you have convert back to numeric variables.

Back to this program I was writing. The program was jumping from within subroutines to other subroutines. Maybe 10 at the most. At one point of the program I had jump to a subroutine that save the data first then printed the form. For some strange reason it would first print then save to disk. Then sometimes it would ignore these instructions all together. Sometimes it would print and ignore the save function. Sometimes the opposite. Then (continued)



# THE PRESIDENT'S PAGE



I read the news today, how free it makes me feel.  
How good it is to be alive, I feel no pain, no strife, no tears.  
I'm free at last, from all the things I used to do.  
I'm free at last, from all the things I used to do.

Our BBS, etc.

Hi there. By the time this reaches you, our BBS should be up and running. I had the privilege of being one of the first callers when Kevin was testing it. It looks like an outstanding system and compares favorably with any that I've been on and I've been on most of the local ones and several not so local (but not recently). The online games are a unique feature that I haven't seen before on this kind of BBS. All of the standard features are included and are easily accessed but there are several menu screens and they may seem complex at first. I recommend making a printout of each menu screen for quick reference. This will save you from constantly calling the menus up on the screen and save your online time for other things.

For those of you who don't have a modem but plan to get one, let me warn you: A modem is extremely habit forming in most cases, for at least the first six weeks (I speak from experience). Watch that phone bill. Adding a modem to your system opens up a whole new realm of computing experience. You may not realize that you are not limited to calling ATARI BBS's. You can call any BBS, read and leave messages, even download text files. This may not appeal to some of you but I enjoyed seeing what was going on in the rest of the world.

If you haven't checked out our Disk(s) of the Month lately, you may be missing something. High quality software, arcade games, some with documentation, at an unbeatable price. This stuff puts a lot of commercial software to shame. (I'm hooked on "Rail King").

It's not too soon to start thinking about the election of club

officers. Nominations take place in January, the elections in February. Several people have had complaints. This is your chance to do something besides complain and really be involved in a worthwhile organization. Don't be afraid to volunteer. I was reluctant to accept the nomination for this job and by golly, it's been a lot of fun! Who's next?

\*\*\*\*\*

## WACO Board of Directors

President: Chuck Cartia 678-2629

Vice Pres.: Jim Adamson

Past Pres.: Don Stoughton

Secretary: Debbie Davis 864-7216

Treasurer: Kurt Houghtaling 836-3653

Members at Large: Ed Reynolds

Bill Covert

Tim Enright

Newsletter Editor: George Adamson

Assistant Editor: Bud Burnside

8-bit Librarian: Don Shroyer 537-0452

8-bit Assistant: Keith Krause

ST Librarian: Al Stanoszek

ST Assistants: Rick Davis

George Adamson

## Mailing Address:

230 Clairmont St.

North Huntingdon, PA 15642

Dues per year: \$12/individual

\$18/family & business

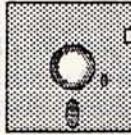
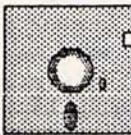
Meetings: 2nd Tues. each month at UP

Church of the Covenant, Irwin, PA

Ad Rates: \$20/page, \$12/half page,

\$7/quarter page

WACO is an independent, non-profit Atari user group founded in 1983.



## PROGRAMMING TIPS AND TRICKS

by Earl Hill

November

Welcome to another month. To continue along the same lines as last month, I would like to talk about some things that I feel our new members would like to know about. Some of the topics may be old hat to some of you, but maybe I can put a new slant on some old topics. I guess this approach is still popular, based on the considerable interest being shown in articles in the ATARI-oriented magazines such as the "New Owner's Column" in ANTIC by David Plotkin.

This month I would like to show you a program which has several uses. It is basically a subroutine, although the program will run and is complete as is.

There are two main ideas behind the program. The first one comes about because of a difficulty ("It's a fine mess you've gotten us into, Ollie!") of us get into at one time or

either when we are programming. If you have done much programming at all, you have probably gotten into the mess where the program you are typing in is completed, and then when you try to SAVE it to the disk you get an Error 162 "Disk Full". Another thing that might happen is that when you attempt to SAVE it to the disk using the same filename as a previous known program on the disk you get an Error 162 or an Error 167 "File Locked". This "overwriting" is a common technique where you are making many small changes in a program. We will assume that you don't have the file MEM.SAV on your disk. (does anyone use MEM.SAV - I sorta doubt it)

Okay, so what do we do about this? One good way is to have a short LISTed program on your disk which can be ENTERed in, and used to access the disk to make changes. As you know, you cannot go to DOS because that will wipe out the program in memory....which is the problem in the first place. Now, how do we do this without going through DOS? For the answer to this, lets wait a while and discuss the second thing we might want

to do.

This is: sometimes we have a program which, say, has a menu with several functions. Let's say it prints out a disk file. Now you then would want to know what programs were on your disk, and exactly how they were spelled, so that you could enter a name in response to a prompt. Here again we have need for a (sub)routine to access the disk without going through DOS. You could even add to the subroutine to do things such as rerunning the program, exiting from the program, etc., but that is a little more than we have time for now. I'll leave that up to you as something to try. If you really want to do that, let me know, I've already written the routine.

Okay, let's restate the problem. We want to access DOS from ATARI BASIC and be able to change things without messing up. The way to do this is with a little-used function of BASIC called the XIO function (the letters I and O - not numbers). The XIO Command (Input/Output) performs most of the functions used by DOS, but OUT OF YOUR BASIC PROGRAM! Neat, huh? The structure of this command is XIO cmd,#chan,task,aux1,"dev". Now what does all this mean? A piece of cake! The cmd is a command number; the #chan is the number of the channel (as previously mentioned in our discussion of the OPEN command, which XIO mimics); next we have the "task"; then we have the auxiliary #1; and finally the device (e.g., a disk drive, a printer, the screen, etc.).... Now I don't want to mislead you, the whole picture of the XIO command is not too simple, but we will use only the parts of it which we need. For more detailed info, see COMPUTE'S Mapping the Atari, page 86 on. To continue, the key to using XIO is the cmd number, as you might have guessed. There are many of these numbers, many of them "device-specific". As I said, the XIO is similar to the more familiar OPEN command, but both of them are BASIC commands. Lets contrast them. These are equivalent: OPEN #2,4,0,"K:" and XIO 3,#2,4,0,"K:". Here, the cmd is 3. There are a lot of these command numbers, all of them doing something

meaning OPEN. Others do things such as erasing a file, locking a file, etc., etc. You will see these numbers used in our program. The "task" codes are those you have seen in the OPEN statements such as 4,6,8 etc. The aux1 codes (not the same) are normally zero, except for some special display-screen applications. You may have also seen the XIO command used in graphic "fill" commands - here, the cmd is 18. Of course, the K: stands for Keyboard. Others could be Printer P:, Screen S:, etc.

Now it's time to get down to business with our program to do all of this. Type it in; I'll guarantee you'll find it both fun to play with as is, and a useful routine to have on your disk when you are programming. This program incidentally is from ANTIC, April 1984, page 18, by William Hough with mods by yours truly. Here it is:

```
10 GOSUB 29700
20 ? "THAT'S ALL FOLK'S!";
30 FOR DE=1 TO 300:NEXT DE
40 END
29600 REM **** ACCESS DISK MENU ****
29700 ? CHR$(125):IF SEC THEN 29720
29710 DIM FILE$(27),CHFILE$(27),ANS$(1),TEXT$(20):SEC=1
29720 CLOSE #4:OPEN #4,6,0,"D:.*":TRAP 29740
29730 INPUT #4,TEXT$?:TEXT$:GOTO 29730
29740 CLOSE #4:TEXT$=""":TRAP 40000
29750 POKE 702,64:?: "DO YOU WANT TO EXIT THE DISK (Y/N)";
29760 INPUT ANS$:IF ANS$<>"N" THEN TRAP 40000:RETURN
29770 GOTO 29790
29780 GOSUB 12250:GOTO 29760
29790 ?: "LOCK, UNLOCK, RENAME, DELETE OR FORMAT"
29800 INPUT ANS$:IF ANS$="L" THEN CMD=35:GOTO 29860
29810 IF ANS$="U" THEN CMD=36:GOTO 29860
29820 IF ANS$="R" THEN CMD=32:?: "ENTER OLDNAME,NEWNAME":GOTO 29870
29830 IF ANS$="D" THEN CMD=33:GOTO 29860
29840 IF ANS$="F" THEN CMD=254:CHFILE$="D":GOTO 29880
29850 GOSUB 29950:GOTO 29800
29860 ?: "ENTER FILENAME ";
29870 FILE$="":INPUT FILE$:CHFILE$="D":CHFILE$(3)=FILE$:IF FILE$="" THEN E
GOSUB 29950:GOTO 29870
29880 IF ANS$>"F" THEN 29930
29890 ?: "DO YOU REALLY MEAN IT?";
29900 INPUT ANS$:IF ANS$="Y" THEN 29930
29910 GOTO 29700
29920 GOSUB 12250:GOTO 12200
29930 TRAP 29940:XIO CMD,#4,0,0,CHFILE$:GOTO 29700
29940 GOSUB 29950:GOTO 29700
29950 POKE 712,68:?:CHR$(253):POKE 712,0:RETURN
```

The program has these unusual line numbers since it was designed to be "above" most user programs, but "below" other ENTER-type utilities, like line renumberers, which commonly use a line range above 30000. Use the program in three ways: 1.) Delete lines 10-40 and LIST it to disk. Use ENTER to merge it with your program. When you want to use DOS functions, just insert the function GOSUB 29700 into the appropriate place in your program. 2.) Use the same program in your BASIC program from the start, say as a Menu GOSUB. 3.) Use it as is with all lines to get the feel of it. Before I forget, wild cards (i.e., \*.\*) will work in the operations such as LOCK & UNLOCK.

(continued)

### WHICH BASIC? (Continued)

things really started getting strange when for no reason it would jump out of the subroutine into the middle of the main program! Well this was a big mystery, one that needed careful investigation. Let me back up a few steps and add a little spice to the sauce. The program was generating errors that being able to locate these errors I would trap them. And sometime I trap the error by design. Say, for instance I was looking for a particular file and it wasn't there. I didn't want to get a system message but a message that I created. Trapping these errors I felt would clear them. But I kept on being haunted by the undesirables. So I figure these errors must be causing the stack to be messed up and cause my program to jump into another part of the program. I finally cleaned up my errors cut out a few subroutines and that seemed to do the trick or so I thought. One particular if-then and while-wend statement being ignored. This was getting frustrating. Enough is enough, I said to myself. I couldn't pinpoint the problem so I did some major reconstruction. Finally I had a program that worked. I started using the program and what followed next.... You didn't want to hear what I was thinking. What was happening was this. Every time I would enter a new record for Emerson, on saving the record, I would get a get/put error, and it would be for only Emerson. If I would change the name, add an s or leave out an o it would work fine. This was it! I quit!. A few days later, like trying to get rid of an old habit but it always seems to come back. I had found myself back working on the program.

In the next article the mystery will be solved I assure you. Also, I will be talking about the newest member of the never-ending basics: Fast Basic.

See you next time! The Doctor!

### PROGRAMMING TIPS (Continued)

Line 10 GOSUBs to our routine. Lines 20-30 put the final message on the screen and END the program. Line 29700 clears the screen and sets up a flag which jumps over the DIM line if the program is RUN a SECond (or more) time(s). This is a logic statement; if SEC=1 (TRUE) then the next line is skipped. The next line DIMensions our variables and sets SEC to 1 (in case of a next time). You will notice that this program is similar to last month's in the call to the disk directory. These things do keep repeating! Line 29720 gets us our disk directory from drive #1 (understood). We exit from this on the error. Note we are using channel #4, and use a 6 to READ the disk directory. If you want, try replacing the OPEN stuff with XIO 3,#4,6,0,"D:\*.X" - same thing. Next we set up an exit if this is all we want. The POKE 702,64 ensures that an upper-case response is provided. Then we set up a little menu with commands to do some DOS kind of functions. The answer gives us the value of the cmd, which when put into line 29930 does our good stuff. Remember to use a comma between filenames as you would in DOS. We have an error message at line 29950 in case anything goes wrong. Line 29870 does the concatenation (there's that word again!) of the filename onto the drive stuff. Line 29870 drops thru to the next one if we get a good file name. Line 29880 is a neat trick. Selections over F go to line 29930 for the action; while selections D & F (the baddies) result in a double-check query. The rest of the stuff is just housekeeping and RETURNing from the subroutine. One note, the author used two lines he didn't need. Do you know which ones? Sorry, no prize. This is just a no credit quiz. BASIC Sig take note. Well, that's a wrap, as they say at the Playhouse. Use it and enjoy. It will go into the subject of how to analyze a file on a disk. Good stuff. See you then.

## TO MY DARLING HUSBAND

by W.J. Parsons

Diablo Valley PC News

I am sending you this letter in a bogus software company envelope so that you will be sure to read it. Please forgive the deception, but I thought you should know what has been going on at home since your ST computer entered our lives two years ago.

The children are doing well. Tommy is seven now and is a bright, handsome boy. He has developed quite an interest in the arts. He drew a family portrait for a school project. All the figures were good but yours was excellent! The chair and the back of your head are very realistic. You would be very proud of him.

Little Jennifer turned three in September. She looks a lot like you did at that age. She is an attractive child and quite smart. She still remembers that you spent the whole afternoon with us on her birthday. What a grand day for Jen, despite the fact that it was stormy and the electricity was out.

I am also doing well. I went blonde about a year ago and was delighted to discover that it really is more fun!

Lars, I mean Mr. Swenson, the department head, has taken an interest in my career and has become a good friend to us all. I have discovered that the household chores are much easier since I realized that you didn't mind being vacuumed but that feather dusting made you sneeze.

The house is in good shape. I had the living room painted last spring. I'm not sure if you noticed it. I made sure the painters cut air holes in the drop cloth so you wouldn't be disturbed.

Well, my dear, I must be going. Uncle Lars, Mr. Swenson, I mean, is taking us all on a ski trip and there is packing to do. I have hired a housekeeper to take care of things while we are away. She'll keep things in order, fill your coffee cup, and bring your meals to your desk, just the way you like it. I hope you and the ST have a lovely time while we are gone. Tommy, Jen and I will think of you often. Try to remember us while your disks are booting.

Love, Mary



HINTS FOR ATARI OWNERS  
Collected by John Nagy

Ever go blind trying to read your 8-bit screen during a long print or computation that allows the "attract" mode to begin? After about 7 minutes without a keystroke, the ATARI starts shifting colors and densities on the screen to prevent a "burn in" of the screen phosphors. If you need to see what's on the screen but are afraid to press a key for fear of upsetting the program, try pressing SHIFT/CONTROL/A. This combination is seen by the operating system as "a key was pressed, but I don't have any data from it". This brings the screen back to normal with no danger of a key command bouncing around in your procedure.

by Ed Smith

(REPRINTED FROM SPACE PROBES)

Fancy Coding for Fun \*\*\* Fancy Coding for FUN \*\*\* Fancy Coding for FUN

There is a secret message for you to decode in the following program. Just type in to the 8-bit computer this Basic program and after saving it, run it by typing RUN.

```

20 DIM C$(120):ESC=27
30 MM=24
40 FOR I=1 TO MM:READ A:C$(I)=CHR$(A):
NEXT I
50 ? "Guess Secret Message by entering
a number between 1 and 126"
60 INPUT N
70 FOR I=1 TO LEN(C$(I,I)):A=A-N:IF A
<0 THEN A=I
80 ? CHR$(ESC):CHR$(A);:NEXT I:?:GOTO
60
100 DATA 96,87,95,84,88,76
105 DATA 43,63,43,84,94,43
110 DATA 76,43,82,93,80,76
115 DATA 95,43,82,76,88,80

```

Just enter any number between 1 and 127 to guess the message. If you enter an incorrect number you will get unintelligible characters appear on the screen. Enter the correct number and you will see the secret message before your very eyes.

## Tired of Paying High Online Charges and Sign-Up Fees?

## COMPUTALK TCS™

The BBS for your Atari™

- Network of 6 Atari computers linked together.
- Compu-Gab, CB Simulation with both Public and Private areas.
- Compu-Trek, one of 5 Multi-User Online Adventures.
- Over 2,000 downloads for both the 8-bit and ST Computers.
- Accessible through PC Pursuit.
- Online Conferences, Message Bases, E-Mail, Atari News, and more!!

★ ONLY \$25.00 for 6 Months ★  
No Sign-Up Fees / No Online Charges

Call today and sign-up online for a trial account.  
(817) 589-2588 (Direct Access)  
(214) 589-2588 (using PC Pursuit)



**COMPUTALK TCS**

P.O. BOX 18346 / Fort Worth, Texas 76118

## WACO ST LIST 2

Disk 144... 332,551 bytes extended... Utilities- Neocal12, Normcurve, Autorun, Lotto.08 picker, Power calculator, Schizo 1.1, Spelling, Xutility, Screensave, Private Eye acc., ROCPI acc., ultimate copy, Helix.

Disk 145... 702,055 bytes DS... Accessory, Ramdisk, Diskmgr, Label-arc, Coldboot, Zenith-arc., Rechner acc, Unitem-arc, Acc Load, Newword, STQ format, Gem4Arc3.

Disk 146... 334,645 bytes... Utilities- Transporter, Solapak demo, Copy to ram, Disklabel, Grabber, Nugrabb, Word400 rev, Verify.

Disk 147... 327,758 bytes... Megabit by Darek Mihocka, Multi-Lingual Writer demo, Starterm, Formfeed, Dr. Floppy.

Disk 148... 291,361 bytes... DCOPY is must-have DOS which includes unarcer and many utilities. Versions 1.90.PRG and 1.91 and 2.0 TOS included. Also Amiga emulator, Hotshot, Ulticopy, Private Eye 2.0, ZMAG June '87, Dattrcon.ARC.

Disk 149... 301,766... Animated sequence of Conan wielding sword, also swimming fish.

Disk 150... 342,848 bytes... 25 Tiny pix slideshow including animations.

Disk 151... 721,453 extended... One meg demo of space probe animation done with ANTIC's Cybermate Studio.

Disk 152... 349,826 bytes... Address book, Gradebook, Arcshell2, Keyedit, Gulam, BBS List.

Disk 153... 357,416 extended, Eamon Adventure Games- Beginner's Cave, Devil's Tomb, Death Star, Holy Grail. Version 2.0 of main hall.

Disk 154... 236,530 bytes... Kid Mixup and Kidsketch educational games, Bullcow and Startrek Basic games.

Disk 155... 266,604 bytes... Collection of old and new- Reversi, Megaroid, Bee, Jet, Amiga Ball, Frecover, Fmtcopy, FS Editor, Memedit, DirPrint, If-Read-Write.

Disk 156... 245,071... Fabulous and colorful (more than 16 colors) graphic presentation "Sonic Medley" with MIDI.

Disk 157... 301,610... Alias, Animaker, Animate, Stocks, ST Intro Tutorial, Sysmap.

Disk 158... 349,793... Arced files- Cardmaker, DKeep3, Graftool, Ybatch11, Setpal, Startup, Midinet.

Disk 159... 318,497 bytes... Printshop to Printmaster converters, Printmaster borders, converted icons.

Disk 160... 491,135 bytes DS... C Language and files, Desktop2, Multitasking, ST Replay text, Zenith, Acc Load, Startup.

Disk 161... 303,415... Another Fourth of July Alite MIDI slideshow. Long-playing.

Disk 127... 133 items... 168,960 bytes. Format, Format IBM, CZ Voice Patches, Print, GE downloads, Jan-87 CES news.

Disk 128... 794,863 bytes DS... Permanent ramdisk, great labeler program, Shakem animation, Synfile converter to many ST databases, Deluxe Space Invaders, awesome musical band animation from Germany, Eightbit, Music 60's file for EZ Track.

Disk 129... 665,265 bytes DS... Dataconverter to convert 8-bit to DataRetrieve, Cash register sample program, GFA Basic Runtime, Autopsy to analyze system crashes, Disassemble, Gulam program and doc, Biclock, Seektest, Brun.prg, Tek to Gem.

Disk 130... 744,937 DS, Dr. WHO slideshow, Traffic pinball game, Lunar Lander game. Jeopardy games for mono, Typewriter acc., Diskcatalog doc.

Disk 131... 315,475 bytes... Games- Stoneage Deluxe (like Boulderdash), Bridge-It, Quiz Program.

Disk 132... 284,203... Games- Tunnelvision, Spacewar, Missile Command, Color Krabit (Chess).

Disk 133... 337,900 bytes... Card games- Eliminator, Solitaire, Casino Craps, Pente.

Disk 134... 352,591 bytes... ST REPLAY... demo of sounds produced with Michtron's program.

Disk 135... Playable demo of Activision's Shanghai, solitaire only.

Disk 136... 392,325 bytes extended... Four arced demos of Michtron programs: GOLDRUNNER, AIRBALL, TANGLEWOOD, and SPRITE CONSTRUCTION.

Disk 137... 313,018 bytes... One meg spinning globe demo plus smaller demos: Rich2, Sphere, ST Patterns. Supbor.

Disk 138... 683,575 bytes... Matt's Mood digitized music demo, requires one meg.

Disk 139... 683,939 extended... Digitized slideshow of Ghostbusters, Raiders of Lost Ark, Madonna, Cynthia, and cartoon Mac Grows up.

Disk 140... 679,421 DS... Demo of Aladdin's magazine issue #2 including press conference with Reagan.

Disk 141... 748,831 DS extended... Demos of ALIANTS game, Talking Max with speech synthesizer, Digitized music, and single picture bird.

Disk 142... SS... WordPic and Spellpic educational games, Galaxy, SetSG10, Publishing Partner utilities.

Disk 143... 318,573 DS... Fourth of July MIDI Alite slideshow (plays speaker too). Long playing.

Disk 162... 349,683 bytes... Bannermaker, Label Jr, Cardmaker, Neocal12, Modcount.arc, Accsel.arc, Fontmanual.arc, Graftool.arc.

Disk 163... 335,210 bytes... Animations- Amiga's Juggler comes to the ST (almost identical except for colors, requires 1 meg though) plus digitized Reagan. Don't miss this one.

Disk 164... 239,005... Kidsong "Makin Akin," Barnyard game, and Ship Combat.

Disk 165... 310,684 bytes... Revised Amulti Multitasking version 1.1, DC Format for ST, Mac, and IBM formats, Leisure Suit Larry solution.

Disk 166... 322,756 bytes... Complete program for creating Newsdisk, Menu- catalog program, Rez, Chicagofest Cancellation explanation.

Disk 167... 297,370 bytes... Complete inventory program for home or business, NBC Hardcopy printer program for 24 pin printers.

Disk 168... 314,148 bytes... "Small World" Disney MIDI slideshow.

Disk 169... 252,347 bytes... Games- Azarian2 revision, Lander2, Breaknoid, Fastlife.

Disk 170... 233,633 bytes. You must see Multiboink. New Ultimate Format has a choice of pictures and control panel. Folderfix solves the 40 limit bug. Megaboot is for those with both monitors. Videolabel uses Publishing Partner. Also Mikeytrax demo.

Disk 171... 237,294... WORLD text adventure like Infocom, ST Castle-Basic and Star Galaxy

Disk 172... 320,047... Wheel of Fortune 2.0 upgrade with six puzzles, Plutos demos, Lottery picker.

Disk 173... 269,143... Digitized voices of Startrek crew and sound effects from TV show.

Disk 174... 252,149 bytes... DGDB German game similar to Shamus, Triyatze, Pawn Solution.

Disk 175... 299,214 bytes... Public domain financial cookbook including savings and loan calculator, Bugbop (mono animation), Window terminal program, Autoduel cheater program, listing of utilities for Publishing Partner. Arced and unarc'd files included on disk.

Disk 176... 594,220 bytes DS extended. Another impressive Tiny slideshow, 34 pictures.

Disk 177... 329,437 bytes... Updated version of ST Writer 1.71 (Get drivers, etc. from earlier version) in an auto folder, also many arced files including visicalc, command, DM Banner, RamBuffer, Trans100, TV150 for Magic Sac, Ultiformat.

\*\*\*\*\*  
NEW- Disk 199... Draw Poker and Star Trek TBM for PC Ditto

DISK 178... 270,300 bytes... DGDB2, speeded up and improved version of German shoot-em-up that resembles Shamus (looks too good to be PD), Chipgame- Challenge your electronic Knowledge in this unusual game, and Jeff's Theme- a graphic demo StarTrek2- Basic with docs, Backgammon

Disk 179... 300,092 bytes... Enjoyable comic strip from Bloom County, also Aptitude tests for executives.

Disk 180... 320,582 bytes... Win or lose on the slot machine and other GFA BASIC programs.

Disk 181... 316,255 bytes... Mostly utilities. DD Character Generator, PCommand, Slowdown TOS, Bootmaker, Crunch3, MashTTP, Rice sex survey, Megabit26, Twister, Foxy-Tny, DCOPY2.0, MDBZUtility.

Disk 182... 314,797 bytes... Animation demo requires VIEWIT, also Larn2 game.

Disk 183... 673,525 bytes, One meg DS, WIND HIM UP- Digi Sound demo from Germany.

Disk 184... 661,411 bytes... Still another one meg DS Digi Sound demo from Germany- EQUINOX.

Disk 185... 276,365 bytes. ST810Ulator, Software and plan for hardware

Disk 186... SS... Smoothtalker synthesized speech demo of five First Byte programs.

Disk 187... Cyberscape awesome demo requiring full one meg and DS drive.

Disk 188... SS... Little Computer Demo. Juke box includes Axle F and others. Also animated UFO and STHooked pic.

Disk 189... 330,039 bytes. ST WRITER 1.75, Melt.acc, ST Wordsearch, Disklib, GENIE Help, Torpedo-3AS, Menukit, Pixelpro.

Disk 190... 344,623. 512 color slideshow (Spectrum 512). Who needs Amiga now?

Disk 191... SS... ST Writer 2.0 and 2.3 Ditto Drive, Ditto 80. Private Eye and Doc.

Disk 192... 345,183. Collection of arced files: Biorythm, Format 1.1, Blue Moon, Fillrt, Driver, Soundex, STRitty radio patch, Ulticopy

Disk 193... 324,010. One meg ST ray trace demo, a literal three ring circus.

Disk 194... 335,041. Brickyard. Karate demo, RXT Tos, Starfire, Foursix.

Disk 195... 251,131. Floyd the Droid shoot-em-up with digitized sound.

Disk 196... 424,055 DS. TOY PROLOG with German docs, Superboot with docs, Diskmechanic with docs, Disk 2nd.

Disk 197... 680,026 DS. Shopic slideshow.

Disk 198... ST Transformer by Darek Mihocka

\*\*\*\*\*  
\* WESTMORELAND ATARI COMPUTER \*  
\* ORGANIZATION \*  
\*\*\*\*\*  
NOVEMBER, 1987 LIBRARY DISK OF THE MONTH  
DISK #1

SIDE A-----

THE EYES OF THE ILLUMINATTI  
DOCUMENTATION

Boot with Basic. These are the documentation files for this fantastic graphics adventure. The docs are as interesting as the adventure itself.

SIDE B-----

THE EYES OF THE ILLUMINATTI  
GRAPHICS ADVENTURE

Boot with Option key down. This is a 3-D adventure. If you have any of those red and blue glasses laying around, wear them when you play this commercial quality adventure.

DISK #2

SIDE A-----

MICRO MAP

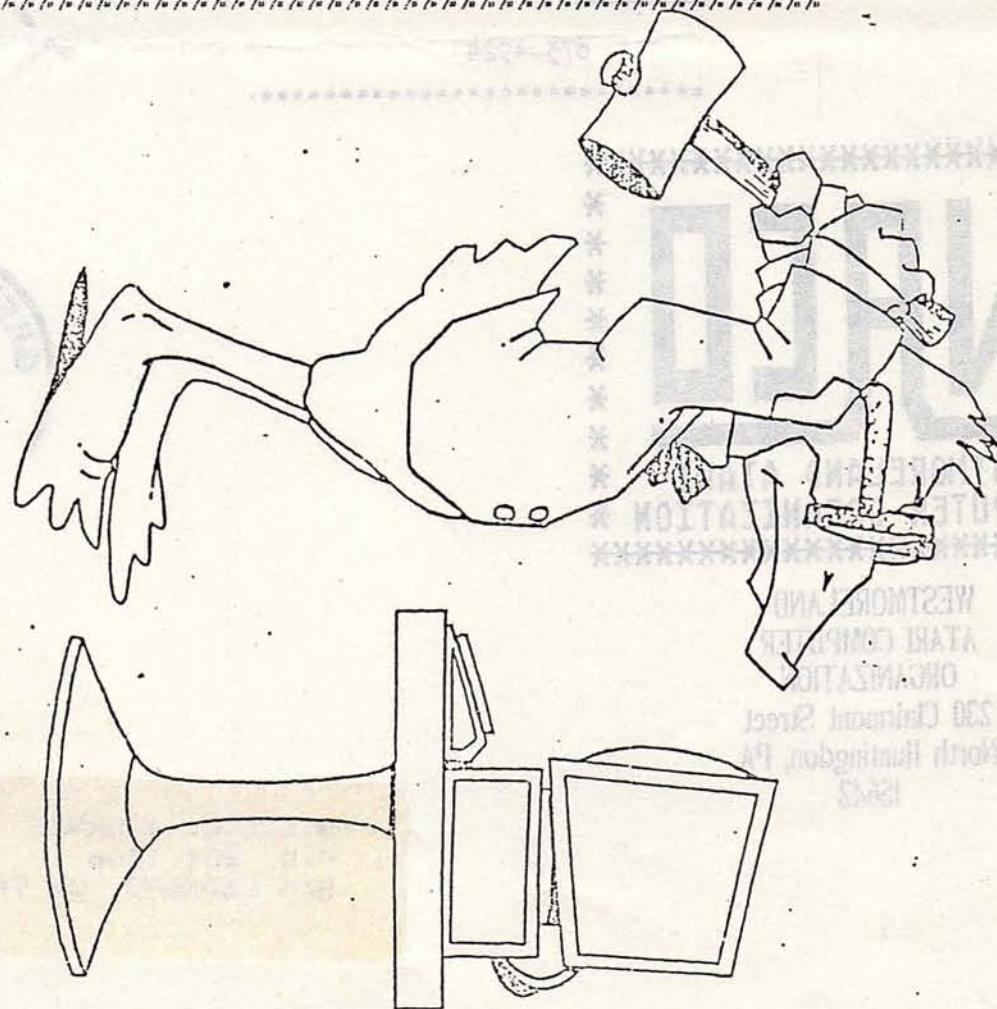
This program will allow you to create a graphics adventure of your own with scrolling screens and landscapes.

SIDE B-----

SHOPPER'S HELPER

This little program will help mom make her shopping day a little nicer. It will print up a list of items and even pick the winning lottery numbers for her.

"PRESS ANY KEY TO CONTINUE"



## DEMOS

When W.A.C.O. President Chuck Cartia does a demo, it is always well received. Chuck will have a double feature at the Tuesday, November 10 meeting of Westmoreland Atari Computer Organization at 7:30 P.M. at the United Presbyterian Church of the Covenant, off Oak Street, Irwin.

Chuck will demonstrate Atari's "Planetarium" and then map out the perils in the classic "Pitfall II."

The 8-bit disk of the month will be offered, and Al Stanoszek, the new ST librarian, will be announcing the first ST disk of the month. (Part II of WACO's listing of nearly 200 ST disks is included in this issue.) Club disks are now only \$3 for members.

\*\*\*\*\*  
WACO WARD ON LINE NOV. 1  
\*\*\*\*\*

673-4924



WESTMORELAND  
ATARI COMPUTER  
ORGANIZATION  
230 Clairmont Street  
North Huntingdon, PA  
15642

## WACO WARD ON LINE

WACO's board of directors approved an official BBS with Kevin Brady as head sysop. Jim Adamson and Al Stanoszek are assisting in getting the WACO Ward on line.

The BBS will be running ST BBS Express via a 520 and two double-sided drives through a 1200 baud Volksmodem purchased by the club.

Currently paid up WACO members will have more access time than non-members. Since WACO's dues are only \$12 per year, this additional service makes a membership just about the best bargain to be found anywhere. Please buy lots of club disks, both 8-bit and ST, to help support the BBS.



S.L.C.C. JOURNAL  
P.O. BOX 1506  
SAN LEANDRO, CA 94577-0374